

Serial Number: 10/060,780

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**IN THE CLAIMS:**

1. (Currently Amended) A system for authentication, comprising: An authentication system, comprising:  
a processor circuit having a processor and a memory;  
an authentication system stored in the memory and executable by the processor, the authentication system comprising:  
a plurality number of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task; and  
an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter until all of the authentication agents have been requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents fails to authenticate the unauthenticated user parameter.
2. (Currently Amended) The authentication system of claim 1, wherein the authentication manager waits for a response from each of the authentication agents, each response indicating whether the unauthenticated user parameter has been authenticated.
3. (Currently Amended) The authentication system of claim 1, comprising:  
an external authentication service; and  
wherein at least one of the authentication agents calls upon the external authentication service to authenticate the unauthenticated user parameter.

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4. (Currently Amended) A system for authentication, comprising: The authentication system of claim 1, further comprising  
a processor circuit having a processor and a memory;  
an authentication system stored in the memory and executable by the processor, the authentication system comprising:  
a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task, wherein a parameter type is associated with each of the authentication agents; -  
an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and  
wherein each of the authentication agents authenticates the unauthenticated user parameter if the unauthenticated user parameter is of the parameter type associated with the respective authentication agent, and each of the authentication agents transmits a message to the authentication manager that causes the authentication manager to proceed with the authentication procedure if the unauthenticated user parameter is not of the parameter type associated with the respective authentication agent.

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5. (Currently Amended) A system for authentication, comprising: The authentication system of claim 4,  
a processor circuit having a processor and a memory;  
an authentication system stored in the memory and executable by the processor, the authentication system comprising:  
a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task, wherein a parameter type associated with each of the authentication agents; and  
an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter wherein each of the authentication agents authenticates the unauthenticated user parameter if the unauthenticated user parameter is of the parameter type associated with the respective authentication agent; and  
wherein:  
each of the authentication agents transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter;  
each of the authentication agents transmits a valid response to the authentication manager upon a successful authentication of the unauthenticated user parameter; and  
each of the authentication agents transmits a valid response to the authentication manager if the unauthenticated user parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent.

6. (Currently Amended) The authentication system of claim 1, wherein:  
each of the authentication agents transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter; and  
each of the authentication agents transmits a valid response to the authentication manager if the unauthenticated user parameter is successfully authenticated.

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7. (Currently Amended) ~~A~~ The authentication system for authentication, comprising: of claim 1,

a processor circuit having a processor and a memory;

an authentication system stored in the memory and executable by the processor, the authentication system comprising:

a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task;

an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and

wherein, upon startup, the authentication manager is unaware of how many of the authentication agents exist in association with the authentication system and the authentication manager discovers the authentication agents.

8. (Currently Amended) ~~The authentication system of claim 7, wherein the authentication manager is configured to generate~~ generates a lookup table listing each of the authentication agents during startup after the authentication agents that are discovered.

9. (Currently Amended) ~~An authentication method, comprising: executing providing for a plurality number of authentication agents in a computer system, each of the authentication agents being configured to perform at least one authentication task; and~~

sequentially requesting each of the authentication agents to authenticate an unauthenticated user parameter input into the computer system until all of the authentication agents have been requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents fails to authenticate the unauthenticated user parameter, ; and obtaining a response from each of the authentication agents indicating whether the unauthenticated user parameter has been authenticated.

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10. (Original) The authentication method of claim 9, comprising requesting an external authentication service to authenticate the at least one user parameter.

11. (Currently Amended) An authentication method, comprising: The authentication method of claim 9, further comprising  
executing a plurality of authentication agents in a computer system,  
each of the authentication agents being configured to perform at least one authentication task; and  
associating a parameter type with each of the authentication agents, wherein each of the authentication agents authenticates only those unauthenticated user parameters that are of a parameter type that is associated with the respective authentication agent;  
sequentially requesting each of the authentication agents to authenticate an unauthenticated user parameter input into the computer system;  
obtaining a response from at least one of the authentication agents indicating whether the unauthenticated user parameter has been authenticated if the unauthenticated user parameter is of the parameter type associated with the respective authentication agents; and  
obtaining a response from at least one of the authentication agents causing the sequential requesting of the authentication agents to authenticate the unauthenticated user parameter to continue if the unauthenticated user parameter is not of the parameter type associated with the respective authentication agent.

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12. (Currently Amended) An authentication method, comprising: The authentication method of claim 11, wherein:  
executing a plurality of authentication agents in a computer system,  
each of the authentication agents being configured to perform at least one authentication task;  
executing an authentication manager in the computer system to  
sequentially request each of the authentication agents to authenticate an  
unauthenticated user parameter input into the computer system;  
transmitting an invalid response from at least one of the authentication agents to the an authentication manager upon a failure to authenticate a respective user parameter;  
transmitting a valid response from at least one of the authentication agents to the authentication manager upon a successful authentication of the unauthenticated user parameter; and  
transmitting the valid response from at least one of the authentication agents to the authentication manager if the unauthenticated parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent.

13. (Original) The authentication method of claim 9, further comprising:  
transmitting an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter; and  
transmitting a valid response to the authentication manager if the unauthenticated user parameter is successfully authenticated.

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14. (Currently Amended) An authentication method, comprising: The authentication method of claim 9, further comprising the step of  
executing a plurality of authentication agents in a computer system,  
each of the authentication agents being configured to perform at least one  
authentication task;  
executing an authentication manager in the computer system, wherein  
the authentication manager is unaware of how many of the authentication agents  
exist when the authentication manager is first executed;  
discovering the authentication agents with the authentication manager  
upon execution of the authentication manager;  
employing the authentication manager to sequentially request each of  
the authentication agents to authenticate an unauthenticated user parameter input  
into the computer system; and  
obtaining a response from each of the authentication agents indicating  
whether the unauthenticated user parameter has been authenticated.

15. (Currently Amended) The authentication method of claim 14, further comprising employing the authentication manager to generate generating a lookup table listing each of the authentication agents after the authentication agents that are discovered upon execution of the authentication manager.

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16. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising:

code that embodies a plurality ~~number~~ of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task; and

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter until all of the authentication agents have been requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents fails to authenticate the unauthenticated user parameter.

17. (Currently Amended) The computer program embodied on a computer readable medium and executable by the computer system of claim 16, wherein the authentication manager further comprises code that waits for a response from each of the authentication agents, each response indicating whether the unauthenticated user parameter has been authenticated.

18. (Currently Amended) The computer program embodied on a computer readable medium and executable by the computer system of claim 16, wherein at least one of the authentication agents further comprises code that calls upon an external authentication service to authenticate the unauthenticated user parameter.



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19. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising: The computer program embodied on a computer readable medium of claim 16, further comprising

code that embodies a number of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task;

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and

code that embodies a parameter type associated with each of the authentication agents, wherein each of the authentication agents authenticates the unauthenticated user parameter if the unauthenticated user parameter is of the parameter type associated with the respective authentication agent; and

each of the authentication agents comprising code that transmits a message to the authentication manager that causes the authentication manager to proceed with the authentication procedure if the unauthenticated user parameter is not of the parameter type associated with the respective authentication agent.

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20. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising: ~~The computer program embodied on a computer readable medium of claim 19, wherein each of the authentication agents further comprises~~

code that embodies a number of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task;

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and wherein each of the authentication agents further comprises:

code that transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter;

code that transmits a valid response to the authentication manager upon a successful authentication of the unauthenticated user parameter; and

code that transmits a valid response to the authentication manager if the unauthenticated user parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent.

21. (Currently Amended) The computer program embodied on a computer readable medium and executable by the computer system of claim 16, wherein each of the authentication agents further comprise:

code that transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter; and

code that transmits a valid response to the authentication manager if the unauthenticated user parameter is successfully authenticated.

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22. (Currently Amended) A computer program embodied on a computer readable medium and executable by a computer system for performing authentication, comprising: ~~The computer program embodied on a computer readable medium of claim 16,~~

code that embodies a number of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task; and

code that embodies an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and

wherein the authentication manager further comprises code that discovers the authentication agents upon an initial execution of the authentication manager, the authentication manager being unaware at the time of initial execution of how many of the authentication agents exist that may be requested by the authentication manager to authenticate the unauthenticated user parameter.

23. (Currently Amended) The computer program embodied on a computer readable medium and executable by the computer system of claim 22, wherein the authentication manager further comprises code that generates a lookup table listing each of the authentication agents after initial execution after the authentication agents that are discovered.